ISIS-4797 PATENT

## **ABSTRACT**

Compositions and methods for inhibition of desulfurization in oligonucleotides comprising one or more phosphorothioate linkages. Antioxidants which partition into the aqueous phase of bi-phasic or multi-phasic topical pharmaceutical formulations inhibit desulfurization of phosphorothioate oligonucleotides, resulting in enhanced oligonucleotide stability.